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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/537,268

06/01/2005

Pia Baum

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EXAMINER

NGUYEN, KHANH TUAN

ART UNIT

PAPER NUMBER

1751

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/537,268

Applicant(s)

BAUM ET AL.

Examiner

Khanh T. Nguyen

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. The preliminary amendment filed on 06/01/2005 is entered. Claims 1-19 are currently pending.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 06/01/2005 has been partially regarded by Examiner and made of record in the application file.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-19 are rejected 35 U.S.C. 103(a) as being unpatentable over Takagi et al (U.S Pat. 6,447,696 hereinafter, "Takagi") in view of Walles et al (U.S Pat. 3,097,046 hereinafter, "Walles").

Regarding claims 1, 2 and 4, Takagi discloses grafted polymer comprising a polyether backbone compound (A) and a graft component (B) grafted onto the polyether compound (A), col. 3, lines 1-8. A polyether compound (A) is a backbone polymer, which is readable for being (A) backbone polymer in the present claims 1, 2 and 4. The grafted component (B) includes the monoethylenically unsaturated monomers (b1) and (b2). The monoethylenically unsaturated monomer (b1) such as N-vinylpyrrolidone is readable for being a cyclic nitrogenous vinyl monomer in the present claims 1 and 2. The monoethylenically unsaturated monomer (b2) includes (b2-1) a carboxyl-group-containing monoethylenically unsaturated monomer and (b2-2) a cationic monoethylenically unsaturated monomer such as N-vinylimidazole, 2-vinylpyridine, 4-vinylpyridine (col. 4, lines 33-55 and col. 5, lines 16-19). The monoethylenically unsaturated monomer (b2- 2) is readable for being a second nitrogenous heterocycle monomer (B2) and the content of the side chains (B) being present in the resulting graft polymer from 35 to 55 wt% based on the total polymer (Col. 2, lines 24-47) in the present claims 1, 2 and 4. Takagi discloses the graft components in a proportion of 0.1 to 1.2 parts by weight per 1 part by weight of the polyether main chain. This corresponds to a proportion of side chains on the graft polymer of 9 to 55 weight percent.

The difference between the present claims and Takagi invention is that Takagi discloses an additional hydrophilic polymerizable carboxyl-group-containing monoethylenically unsaturated monomer (b2-1). Also, Takagi does not disclose the nitrogenous heterocycle as leveling agents for textile dyeing and textile printing.

However, Walles discloses nitrogenous heterocycle as leveling agents for textile dyeing and textile printing (Col. 2, lines 18-20).

It would have been obvious to one of ordinary skill in the art to utilize the nitrogenous heterocycle as leveling agents for textile dyeing and textile printing in as taught by Takagi in view of Walles. Therefore, one of ordinary skill in the art would have had a reasonable expectation of success, because such leveling agents for textile dyeing and textile printing are expressly suggested by Takagi in view of Walles and therefore is obvious.

Regarding claim 3, Takagi further discloses the method as claimed in claim 2, wherein the auxiliaries for textile dyeing are selected from the group consisting of stripping agents, leveling agents and aftersoaping agents (Col 7, lines 53-61 and Col. 10, lines 14-20).

Takagi is relied upon as set forth above. With respect to instant claim 5, Takagi further discloses a stripping agent comprising at least one graft polymer constructed from a polymeric grafting base A which contains no monoethylenically unsaturated units, and polymeric side chains B formed from copolymers of at least two monoethylenically unsaturated monomers B1 and B2 which each contain at least one nitrogenous heterocycle and optionally further comonomers B3 (Col. 3, lines 9-32 and Col. 7, lines 53-61), wherein said side chains B account for more than 35% by weight fraction of said graft polymer (Col. 2, lines 24-47). Takagi discloses the graft

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components in a proportion of 0.1 to 1.2 parts by weight per 1 part by weight of the polyether main chain. This corresponds to a proportion of side chains on the graft polymer of 9 to 55 weight percent.

With respect to instant claim 6, Takagi further discloses a process for stripping off-shade dyeings off textile materials, which comprises using a stripping agent comprising at least one graft polymer which contains units derived from at least 2 monoethylenically unsaturated monomers B1 and B2 which each contain at least one nitrogenous heterocycle (Col. 3, lines 9-32 and Col. 7, lines 53-61).

With respect to instant claim 7, Takagi in view of Walles disclose a leveling agent comprising at least one graft polymer constructed from a polymeric grafting base A which contains no monoethylenically unsaturated units (Col. 3, lines 1-8), and polymeric side chains B formed from copolymers of at least two monoethylenically unsaturated monomers B1 and B2 which each contain at least one nitrogenous heterocycle and optionally further comonomers B3 (Col. 3, lines 9-32 and Col. 7, lines 53-61), wherein said side chains B account for more than 35% by weight fraction of said graft polymer (Col. 2, lines 24-47). Takagi discloses the graft components in a proportion of 0.1 to 1.2 parts by weight per 1 part by weight of the polyether main chain. This corresponds to a proportion of side chains on the graft polymer of 9 to 55 weight percent.

Regarding claim 8, Takagi in view of Walles further disclose the leveling agent as

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claimed in claim 7, wherein at least one copolymer is a graft polymer (Col. 3, lines 9-32).

With respect to instant claim 9, Takagi further discloses a process for leveling dyeings on textile materials, which comprises using a leveling agent comprising at least one copolymer which contains units derived from at least 2 monoethylenically unsaturated monomers B1 and B2 which each contain at least one nitrogenous heterocycle (Col. 3, lines 1-32).

Regarding claim 10, Takagi further discloses the process as claimed in claim 9, wherein at least one copolymer is a graft polymer (Col. 3, lines 9-32).

Regarding claim 11, Takagi further discloses an aftersoaping agent comprising at least one copolymer which contains units derived from at least 2 monoethylenically unsaturated monomers B1 and B2 which each contain at least one nitrogenous heterocycle (Col. 3, lines 9-32).

Regarding claim 12, Takagi further discloses the aftersoaping agent as claimed in claim 11, wherein at least one copolymer is a graft polymer (Col. 3, lines 9-32).

Regarding claim 13, Takagi further discloses a process for afterclearing dyed or printed textile, which comprises using at least one copolymer containing units derived

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from at least 2 monoethylenically unsaturated monomers B1 and B2 which each contain at least one nitrogenous heterocycle (Col. 3, lines 9-32).

Regarding claim 14, Takagi further discloses the process as claimed in claim 13, wherein at least one copolymer is a graft polymer (Col. 3, lines 9-32).

Regarding claim 15, Takagi further discloses the process as claimed in claim 14, wherein at least one graft polymer is constructed from a polymeric grafting base A which contains no monoethylenically unsaturated units, and polymeric side chains B formed from copolymers of at least two monoethylenically unsaturated monomers B1 and B2 which each contain at least one nitrogenous heterocycle and optionally further comonomers B3 (Col. 3, lines 1-32 and Col. 7, lines 53-61).

Regarding claim 16, Takagi further discloses the process as claimed in claim 1, wherein said side chains B account for a more than 35% by weight fraction of said graft polymer (Col. 3, lines 9-32). Takagi discloses the graft components in a proportion of 0.1 to 1.2 parts by weight per 1 part by weight of the polyether main chain. This corresponds to a proportion of side chains on the graft polymer of 9 to 55 weight percent.

Regarding claim 17, Takagi further discloses the process as claimed in claim 14, wherein said polymeric grafting base A is a polyether (Col. 3, lines 1-8).

Regarding claim 18, Takagi further discloses the process as claimed in claim 14, which further comprises using at least one further component selected from complexing agents and nonionic surfactants (Col. 10, lines 9-12).

Regarding claim 19, Although Takagi generally discloses the use of graft polymers as per the present claim 14, auxiliary agents in textile dyeing. The subject matter of claim 14, differs from the known use in that the auxiliary agents are operated at weakly acidic to neutral pH. Nevertheless, if a person skilled in the art were to use the copolymers described by Takagi as auxiliary agents in textile dyeing, he would also achieve the same effect at the claimed pH.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh T. Nguyen whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Khanh T. Nguyen
Examiner
01/04/2007



Mark Kopec
Primary Examiner